

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/510,677  
Source: IFWP  
Date Processed by STIC: 12/12/06

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 12/12/2006

PATENT APPLICATION: US/10/510,677

TIME: 14:39:30

Input Set : F:\API-01-20-US-SeqList.ST25.txt

Output Set: N:\CRF4\12122006\J510677.raw

3 <110> APPLICANT: Sanofi Pasteur, Ltd.  
 4 Therion Biologics, Inc.  
 6 <120> TITLE OF INVENTION: Modified CEA Nucleic Acid and Expression Vectors  
 8 <130> FILE REFERENCE: API-01-20-US  
 10 <140> CURRENT APPLICATION NUMBER: 10/510,677  
 C--> 11 <141> CURRENT FILING DATE: 2004-10-06  
 13 <150> PRIOR APPLICATION NUMBER: US 60/370,972  
 14 <151> PRIOR FILING DATE: 2002-04-09  
 16 <160> NUMBER OF SEQ ID NOS: 32  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 3564  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Homo sapiens  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: misc\_feature  
 28 <222> LOCATION: (1663)..(1663) /  
 29 <223> OTHER INFORMATION: n is a, c, g, or t  
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 34 tacgtccgcg agttcaactc ccaactcctc gacgtgctgg gcaacctcaa cgagctgcgc 120  
 36 ctgcgcggga tcctcaactga cgtcacgctg ctggttggcg ggcaaccctc cagagcacac 180  
 38 aaggcagttc tcctgcctg cagtggcttc ttctattcaa ttttcggggg ccgtgcggga 240  
 40 gtccgggtgg acgtgctctc tctgcccggg ggtcccgaag cgagaggctt cgcctccta 300  
 42 ttggacttca tgtacacttc gcgcctgcgc ctctctccag ccactgcacc agcagtccta 360  
 44 gcggccgcca cctatttgca gatggagcac gtggtccagg catgccaccg cttcatccag 420  
 46 gccagctatg aacctctggg catctcctcg cgccccctgg aagcagaacc cccaacaccc 480  
 48 ccaacggccc ctccaccagg tagtcccagg cgctccgaag gacacccaga cccacctact 540  
 50 gaatctcgaa gctgcagtca agggcccccc agtccagcca gccctgaccc caaggcctgc 600  
 52 aactggaaaa agtacaagta catcgtgcta aactctcagg cctcccaagc agggagcctg 660  
 54 gtccggggaga gaagtctctg tcaaccttgc cccaagcca ggctccccag tggagacgag 720  
 56 gcctccagca gcagcagcag cagcagcagc agcagcagtg aagaaggacc cattcctggt 780  
 58 cccagagca ggctctctcc aactgctgcc actgtgcagt tcaaatgtgg ggctccagcc 840  
 60 agtaccacct acctcctcac atcccaggct caagacacct ctggatcacc ctctgaacgg 900  
 62 gctcgtccac tacggggagt gaatttttca gctgccagaa ctgtgaggct gtggcagggt 960  
 64 gctcatcggg ggctggactc cttgggttct ggggacgaag acaaacccta taagtgtcag 1020  
 66 ctgtgccggg cttcgttccg ctacaagggc aaccttgcca gtcaccgtac agtgcacaca 1080  
 68 ggggaaaagc cttaccactg ctcaatctgc ggagcccgtt ttaaccggcc agcaaacctg 1140  
 70 aaaacgcaca gccgcattca ttccggagag aagccgtata agtgtgagac gtgcggctcg 1200  
 72 cgctttgtac aggtggcaca tctgcccggc cagtgctga tccacaccgg ggagaagccc 1260  
 74 tacccttgcc ctacctgcgg aaccgccttc cgccacctgc agacctcaa gagccacgtt 1320  
 76 cgcattccaca ccggagagaa gccttaccac tgcgacctct gtggcctgca tttccggcac 1380  
 78 aagagtcaac tgcggctgca tctgcgccag aaacacggag ctgctacca caccaaagtg 1440

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80 cactaccaca ttctcggggg gccctagctg agcgaggcc caggccccac ttgttctctg 1500  
 82 cgggtgggaa agctgcaggc ccaggccttg cttccctatc aggcttgggc ataggggtgt 1560  
 84 gccaggccac tttggtatca gaaattgcc aacctttaat ttctcactgg ggagagcagg 1620  
 W--> 86 ggtggcagat cctggctaga tctgcctctg ttttgcctgg canaccctct tccccacaag 1680  
 88 ccagattgtt tctgaggaga gagctagcta ggggctggga aaggggagag attggagtcc 1740  
 90 tggctctcct aagggaatag cctccacct gtggcccca ttgcattcag tttatctgta 1800  
 92 aaatataatt tattgaggcc tttgggtggc accggggcct tcattcgatt gcatttccca 1860  
 94 ctcccctctt ccacaagtgt gattaaaagt gaccagaaac acagaagggtg agatcacagc 1920  
 96 tctgctggca gagattacta gcccttggct ctctcgtttg gcttgggtat tttatattat 1980  
 98 ttctgtcata acttttatct ttagaattgt tctttctcct gtttgtttgc ttgttagttt 2040  
 100 gtttaaaatg gaaaaagggg ttctctgtgt tctgcccctg taattctagg tctggaacct 2100  
 102 ttatttgttc tagggcagct ctgggaacat gcgggattgt ggaattgggt caggaacctt 2160  
 104 ctctggtatt ctggatgttg taggttctct agcagtctag aaatggatac agacatttct 2220  
 106 ctgttcttca agggtgatag gaaccattat gttgagccca aaatggaagt aataataaat 2280  
 108 gcctcctgga ggctgtgggt gtgggggatt ctgtatctgg attccgtatc actccaactg 2340  
 110 gaggtctgtg gtgtggggga ttctgtatct ggattccgta tcaactccaag tggaggctgg 2400  
 112 caggtttttc tgcaagatgg tccagaatct aaaatgtccc attaatctgg tcaactgggt 2460  
 114 ttggctctgc tgtatccatc tatagtggta gagaccacc agggctcaag tggagtccat 2520  
 116 catcctccca cgggggcctg ttcttagtac tgagttgatc gctccatggg ggagagatca 2580  
 118 gacattcctt atcagagatg atgtgacctt ttctgactct gccagctctc tatgaatgtt 2640  
 120 atggcctagg gaagaatcat gaaactctt agcttgatta gatggtaaac agtgtaaac 2700  
 122 catcctttac tacagaggca tatgggtttg aatgttacct ggggttctct ctattgagtt 2760  
 124 gagecccttc ttcttttagt gggttttgga catcttctgg caagtgtcca gatgccagaa 2820  
 126 ccttcttttc ctctagaagg gatggtgctt ggtaacctta ccttttaaaa gctgggtctg 2880  
 128 tgacctggtc ttcccatccc tgcattcctg tctggaacca gtgaatgcat tagaaccttc 2940  
 130 cataggaaaa gaaaaggggc tgagttccat tctgggtttg ctgtagtttg gttgggatta 3000  
 132 ttgttggcat tacagatgta aaagattgac tagcccatag gccaaaggcc tgttctagtt 3060  
 134 gaccaagttt caagtaggat taagaggttg gttgaggggt gcagtttctg gtgtaggcca 3120  
 136 ggtaggtaga aagttaggaa cagggttgcc tcttggtgg gtggagtctc tgaaatgtta 3180  
 138 gaagaagcgc tgaagccttg attgatagtt ctgccccttg ttgcccctgg gcttatctga 3240  
 140 ttatgggacg agggtagaaa gtaagaagca cttttgaatt tgtggggtag aacttcaaca 3300  
 142 ataagtcagt tctagtggct gtgcctggg gactagttag aaagctactc ttctccctct 3360  
 144 tccctctttc tcccatggc cccactgcag aattaaagaa ggaagaaggg aaggcggagg 3420  
 146 agtctataag aaggaatcat gatttctatt tagcagattg gatgggcagg tggagaatgc 3480  
 148 ctgggggtag aaatgttaga tcttgcaaca tcagatcctt ggaataaaga agcctctctg 3540  
 150 cgcaaaaaaa aaaaaaaaaa aaaa 3564  
 153 <210> SEQ ID NO: 2  
 154 <211> LENGTH: 1440  
 155 <212> TYPE: DNA  
 156 <213> ORGANISM: Homo sapiens  
 158 <400> SEQUENCE: 2  
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 161 tctccgacg tgctgggcaa cctcaacgag ctgcgcctgc gcgggatact cactgacgtc 120  
 163 acgtgctgg ttggcgggca acccctcaga gcacacaagg cagttctcat cgctgcagt 180  
 165 ggcttcttct attcaatttt ccggggccgt gcgggagtcg ggggtggacgt gctctctctg 240  
 167 cccgggggtc ccgaagcgag aggtctcgcc cctctatttg acttcatgta cacttcgcgc 300  
 169 ctgcgcctct ctccagccac tgcaccagca gtccatagcg ccgccacctt tttgcagatg 360  
 171 gagcacgtgg tccaggcatg ccaccgcttc atccaggcca gctatgaacc tctgggcac 420  
 173 tccctgcgcc ccttgggaagc agaaccccca acaccccca cggcccctcc accaggtagt 480

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175 cccaggcgct ccgaaggaca cccagaccca cctactgaat ctggaagctg cagtcaaggc 540
177 ccccccagtc cagccagccc tgaccccaag gcctgcaact ggaaaaagta caagtacatc 600
179 gtgctaaaact ctcaggcctc ccaagcaggg agcctggctg gggagagaag ttctgggtcaa 660
181 ccttgccccc aagccagggt cccagtgga gacgaggcct ccagcagcag cagcagcagc 720
183 agcagcagca gtgaagaagg acccattcct ggtccccaga gcaggctctc tccaactgct 780
185 gccactgtgc agttcaaagt tggggctcca gccagtaccc cctacctcct cacatcccag 840
187 gctcaagaca cctctggatc accctctgaa cgggctcgtc cactaccggg aagtgaattt 900
189 ttcagctgcc agaactgtga ggctgtggca ggggtgctcat cggggctgga ctcttggtt 960
191 cctggggagc aagacaaacc ctataagtgt cagctgtgcc ggtcttcgtt ccgctacaag 1020
193 ggcaaccttg ccagtcctcg tacagtgcac acaggggaaa agccttacca ctgctcaatc 1080
195 tgccggagccc gttttaaccg gccagcaaac ctgaaaacgc acagccgcat ccattcggga 1140
197 gagaagccgt ataagtgtga gacgtgcggc tcgcgctttg tacagggtggc acatctgcgg 1200
199 gcgcacgtgc tgatccacac cggggagaag ccctaccctt gccctacctg cggaacccgc 1260
201 ttccgccacc tgcagaccct caagagccac gttcgcatcc acaccggaga gaagccttac 1320
203 cactgcgacc cctgtggcct gcatttcggg cacaagagtc aactgcggct gcctctgcgc 1380
205 cagaaacacg gagctgctac caacacaaa gtgcactacc acattctcgg ggggccctag 1440
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209 <211> LENGTH: 65
210 <212> TYPE: DNA
211 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 3
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216 agatg 65
219 <210> SEQ ID NO: 4
220 <211> LENGTH: 70
221 <212> TYPE: DNA
222 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 4
225 gcctgtgtcc cctagactcc aactcagcaa cggaaataga actctgaccc tgtttaacgt 60
227 gaccaggaac 70
230 <210> SEQ ID NO: 5
231 <211> LENGTH: 70
232 <212> TYPE: DNA
233 <213> ORGANISM: Homo sapiens
235 <400> SEQUENCE: 5
236 acgtgcttta cggaccgat gctcctacaa tcagccctct aaacacaagc tatagatcag 60
238 gggaaaatct 70
241 <210> SEQ ID NO: 6
242 <211> LENGTH: 70
243 <212> TYPE: DNA
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 6
247 acgttaaaca gggtcagagt tctatttccg ttgctgagtt ggagtctagg ggacacaggc 60
249 agggactggg 70
252 <210> SEQ ID NO: 7
253 <211> LENGTH: 70
254 <212> TYPE: DNA
255 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 7

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264 <211> LENGTH: 63
265 <212> TYPE: DNA
266 <213> ORGANISM: Homo sapiens
268 <400> SEQUENCE: 8
269 gatccactat tgttcacggt aatattggga atgaacagtt cctgggtgga ctgttgga    60
271 gtg                                           63
274 <210> SEQ ID NO: 9
275 <211> LENGTH: 70
276 <212> TYPE: DNA
277 <213> ORGANISM: Homo sapiens
279 <400> SEQUENCE: 9
280 gacacagcaa gctacaaatg cgaaacccaa aatccagtca ggcgcaggag gtctgattca    60
282 gtgattctca                                     70
285 <210> SEQ ID NO: 10
286 <211> LENGTH: 70
287 <212> TYPE: DNA
288 <213> ORGANISM: Homo sapiens
290 <400> SEQUENCE: 10
291 tgaatcagac ctcttgccgc tgactggatt ttgggtttcg catttgtagc ttgctgtgtc    60
293 gttctctggtc                                     70
296 <210> SEQ ID NO: 11
297 <211> LENGTH: 79
298 <212> TYPE: DNA
299 <213> ORGANISM: Homo sapiens
301 <400> SEQUENCE: 11
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304 cgattaccgt gtatgccga                                     79
307 <210> SEQ ID NO: 12
308 <211> LENGTH: 70
309 <212> TYPE: DNA
310 <213> ORGANISM: Homo sapiens
312 <400> SEQUENCE: 12
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315 cggtaatcgt                                     70
318 <210> SEQ ID NO: 13
319 <211> LENGTH: 80
320 <212> TYPE: DNA
321 <213> ORGANISM: Homo sapiens
323 <400> SEQUENCE: 13
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## RAW SEQUENCE LISTING

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Input Set : F:\API-01-20-US-SeqList.ST25.txt

Output Set: N:\CRF4\12122006\J510677.raw

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340 <210> SEQ ID NO: 15
341 <211> LENGTH: 80
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343 <213> ORGANISM: Homo sapiens
345 <400> SEQUENCE: 15
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348 gaacttgagc cttcttgcc                                     80
351 <210> SEQ ID NO: 16
352 <211> LENGTH: 80
353 <212> TYPE: DNA
354 <213> ORGANISM: Homo sapiens
356 <400> SEQUENCE: 16
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359 cagcggactc tatacttgcc                                     80
362 <210> SEQ ID NO: 17
363 <211> LENGTH: 80
364 <212> TYPE: DNA
365 <213> ORGANISM: Homo sapiens
367 <400> SEQUENCE: 17
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370 acccgtggag gacaaggatg                                     80
373 <210> SEQ ID NO: 18
374 <211> LENGTH: 80
375 <212> TYPE: DNA
376 <213> ORGANISM: Homo sapiens
378 <400> SEQUENCE: 18
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381 cccaccataa ataagtggta                                     80
384 <210> SEQ ID NO: 19
385 <211> LENGTH: 80
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387 <213> ORGANISM: Homo sapiens
389 <400> SEQUENCE: 19
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392 cattctgaat gccacactca                                     80
395 <210> SEQ ID NO: 20
396 <211> LENGTH: 80
397 <212> TYPE: DNA
398 <213> ORGANISM: Homo sapiens
400 <400> SEQUENCE: 20
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403 ggcaagaaag gctcaagttc                                     80
406 <210> SEQ ID NO: 21
407 <211> LENGTH: 80
408 <212> TYPE: DNA
409 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 12/12/2006

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TIME: 14:39:31

Input Set : F:\API-01-20-US-SeqList.ST25.txt

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1663

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/510,677

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Input Set : F:\API-01-20-US-SeqList.ST25.txt

Output Set: N:\CRF4\12122006\J510677.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1620